

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008747**Date Inspected:** 28-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BW/5CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-012. The welder is identified as #037743 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-U2-FCM.

Segment 5BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA019-005. The welder is identified as #068764 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed back gouging of the CJP root pass on the side plate to bottom plate splice, cross beam side.

This QA Inspector observed fit up and tack welding of counter weight top connection bracket to corner assembly, counter weight side.

Segment 5CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA021-001. The welder is identified as #068764 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM.

Segment 5BE/5CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE5A-008. The welder is identified as #053609 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE5A-006, 007. The welder is identified as #200676 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

Segment 2AE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD27-PP15-004. The welder is identified as #054467 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-repair.

Segment 3BW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing (MT) at the fillet weld of the longitudinal diaphragm to bottom plate connection between panel points 23 and 24, cross beam side.

Segment 5AE/5BE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) of the bottom plate transverse CJP splice and the cross beam side and bike path side; side plate transverse CJP splice.

Segment 2BW

This QA Inspector observed blasting in progress of internal components of the segment.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Plate Yard

This QA Inspector selected seven (7) 460mm x 355mm plate check samples and assigned a QA Lot number to each of following sampled material:

Item 686: 25mm A709M-345F2-X, HT# 09400816N2, Lot# B222-068-09

Item 687: 25mm A709M-345F2-X, HT# 09400425N3, Lot# B222-069-09

Item 688: 35mm A709M-345F2-X, HT# 09304165N3, Lot# B222-064-09

Item 689: 25mm A709M-345F2-X, HT# 09304050N2, Lot# B222-066-09

Item 690: 18mm A709M-345F2-X, HT# 09303946N2, Lot# B222-070-09

Item 691: 25mm A709M-345F2-X, HT# 09303660N2, Lot# B222-067-09

Item 692: 12mm A709M-345T2-X, HT# 09400997N2, Lot# B222-065-09

Samples were marked with Lot number, date and direction of rolling and will be shipped to an Independent Testing lab.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang and Feng Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
